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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,421	01/29/2004	James Bonan	SNY-T5462.02	4534
24337 7590 04/17/2007 MILLER PATENT SERVICES 2500 DOCKERY LANE RALEIGH, NC 27606			EXAMINER LEMMMA, SAMSON B	
			ART UNIT 2132	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE 3 MONTHS		MAIL DATE 04/17/2007	DELIVERY MODE PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/767,421

Applicant(s)

BONAN ET AL.

Examiner

Samson B. Lemma

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date 1-12.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Art Unit: 2132

DETAILED ACTION

1. This is in reply to application filed on January 29, 2004. Claims 1-31 have been examined.

Priority

2. This application claims priority of the provisional application **60/457192** filed **on March 25, 2003**. Therefore, the effective filing data for the subject matter defined in the pending claims of this application is **03/25/2003**.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. **Claims 23-31** are rejected under 35 U.S.C. 101 because the subject matter is directed to non-statutory subject matter.

5. **Claims 23-31** are directed to terrestrial broadcast digital television signal only. The examiner asserts that the limitation of the claims does not fall within the statutory classes listed in 35 USC 101. The language of the claim ("signal") raises a question as to whether the claims are directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

Art Unit: 2132

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1-31** are rejected under 35 U.S.C. 103(a) as being as being unpatentable over **Viswanath Nanjundiah** (hereinafter referred as **Nanjundiah**) (U.S. Publication No 2002/0129243) (Published on September 12, 2002) in view of **Carny et al** (hereinafter referred to as **Carny**) (U.S. Publication No. 2002/0150239) (Published on October 17, 2002)

8. **As per claims 1, 10 and 23**, Nanjundiah discloses a method of encrypting a digital television signal, comprising:

- **Examining unencrypted packets of data in the digital signal to identify a selected packet type;**[Column 2, ref "0023"; column 4, ref. Num "1"] (*One or more data packets from data packet sequence may be selected for encryption to provide a plurality of selected packets and a plurality of unselected packets*)
- **Encrypting the selected packet type** [Column 2, ref "0023"; Column 4, ref. Num "1"](*the selected packets are then encrypted for transmission*);
- **Adding the encrypted packets along with the unencrypted packets of the selected packet type in the digital signal to produce a selectively encrypted digital television signal and broadcasting the selectively encrypted television**

Art Unit: 2132

signal over a terrestrial broadcast transmission system. [Column 2, ref "0023"; column 4, ref. Num "1"](*initiating the transmission of the encrypted data packets and unselected packets as output data packets sequence in transmission medium*)

Nanjundiah does not explicitly disclose

- **Duplicating packets identified as being of a selected packet type;**
- **Encrypting the duplicated packets**

However, in the same field of endeavor, **Carny** discloses selecting at least one segment of the digital content and duplicating the selected packets/segments thereby creating a plurality of copies of each segment and performing different encryption on the plurality of copies.[Column 2, ref. "[0010]"; "[0011]" and "[0012]"]

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to employ the features of duplicating packets identified as being of a selected packet type and encrypting the duplicated packets as per teachings of **Carny** in to the method as taught by **Nanjundiah** in order to provide a system and a method for on-line, real-time personalized encryption of digital content (e.g., video, audio, e-book, executable code etc.). [**See Carny**, paragraph 0047]

9. **As per claims 14, 17 and 20**, **Nanjundiah** discloses a television receiver, comprising:

- **A receiver receiving a terrestrial broadcast digital signal, wherein the signal has a plurality of unencrypted packets and a plurality of encrypted packets,** [Column 5, ref. Num "25"](*receiving a data packet sequence comprising encrypted data packets and unencrypted data packets*) **wherein**
- **The encrypted packets contain information required to decode the digital television signal;**[Column 5, ref. Num "25"](*decoding data packets based upon the*

Art Unit: 2132

decrypted information; this means the encrypted packets are decrypted and the information required to decode the signal will be revealed and decoding is performed based on this information.)

- **A decrypter that decrypts the encrypted packets** [Column 5, ref. Num "25"]
(decrypting one or more of the encrypted data packets to provide decrypted information)
and

- **A decoder that decodes the unencrypted packets and the decrypted packets to produce a signal** .[Column 5, ref. Num "25" and ref. Num "27"]

Nanjundiah does not explicitly disclose

- **Encrypting the duplicated packets**

However, in the same field of endeavor, **Carny** discloses selecting at least one segment of the digital content and duplicating the selected packets/segments thereby creating a plurality of copies of each segment and performing different encryption on the plurality of copies.[Column 2, ref. "[0010]"; "[0011]" and "[0012]")

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to employ the features of duplicating packets identified as being of a selected packet type and encrypting the duplicated packets as per teachings of **Carny** in to the method as taught by **Nanjundiah** in order to provide a system and a method for on-line, real-time personalized encryption of digital content (e.g., video, audio, e-book, executable code etc.). [**See Carny**, paragraph 0047]

10. As per claims 2, 7-9; 11-12; 15,24,29-31 the combinations of Nanjundiah and Carny discloses the method as applied to claims 1,10,14,17,20 and 23 above. Furthermore Nanjundiah further discloses comprising assigning the packet identifier to the encrypted packets.[Column 4, ref. Num "2"](detecting data packets

Art Unit: 2132

sequence information and selecting the data packets for encryption this means the packet sequence information is therefore the identifier. Note all the above claims are related since they all assign an identifier on the packet.)

11. As per claims 3 and 25 the combinations of Nanjundiah and Carny discloses the method as applied to claim 1 and 23 above. Furthermore Nanjundiah further discloses the method wherein the selectively encrypted television signal represents one or more channels in a transport stream. [Column 2, ref "0023"; Column 4, ref. Num "1"](the selected packets are then encrypted for transmission/could be one or more channel);

12. As per claims 4 and 5 the combinations of Nanjundiah and Carny discloses the method as applied to claims 1 above. Furthermore Nanjundiah further discloses the method wherein a key is used to encrypt the duplicate packets. (Column 2, ref. "[0010]"; "[0011]" and "[0012]")

13. As per claims 6 and 13,16,18 and 28 the combinations of Nanjundiah and Carny discloses the method as applied to claims 1, 10,14,17 and 23 above. Furthermore Nanjundiah further discloses the method wherein the selected packet type comprises packets carrying information that is needed to decompress/decode the digital television signal. [Column 5, ref. Num "25"](decoding data packets based upon the decrypted information; this means the encrypted packets are decrypted and the information required to decode the signal will be revealed and decoding is performed based on this information.)

14. As per claims 19 and 22 the combinations of Nanjundiah and Carny discloses the method as applied to claims 17 and 20 above. Furthermore Nanjundiah further discloses the method wherein the encrypted packets carry a payload of a packetized elementary stream header.[column1, ref. "0014"] (a data

Art Unit: 2132

packet may comprise a payload)

15. As per claim 21 the combinations of Nanjundiah and Carny discloses the method as applied to claim 20 above. Furthermore Nanjundiah further discloses the method further comprising a decrypter that decrypts the encrypted packets [Column 5, ref. Num "25" and column 5, ref. Num "27"] (decrypting one or more of the encrypted data packets to provide decrypted information and a decoder that decodes the unencrypted packets and the decrypted packets to produce a signal)

16. As per claims 26 and 27 the combinations of Nanjundiah and Carny discloses the method as applied to claim 23 above. Furthermore Carny further discloses the method wherein a key is used to encrypt the duplicate packets.
(Carny discloses selecting at least one segment of the digital content and duplicating the selected packets/segments thereby creating a plurality of copies of each segment and performing different encryption on the plurality of copies.[Column 2, ref. "[0010]"; "[0011]" and "[0012]")

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.(See PTO-Form 892).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samson B Lemma whose telephone number is 571-272-3806. The examiner can normally be reached on Monday-Friday (8:00 am---4: 30 pm). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BARRON JR GILBERTO can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published


Art Unit: 2132

applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SAMSON LEMMA

S.L.

04/13/2007


Benjamin G. Lerner
Examiner AU 2132